Applicant: Rohan Thakur Docket No.: 1022US/NAT Serial No.: 10/796,717

Filed: 03/08/2004 Page: '' 2 of 9

Amendments to the Claims

This listing of claims will replace all prior versions of claims in this application.

LISTING OF CLAIMS:

1. (Currently amended) A[n ion transfer component] <u>skimmer</u> in a mass spectrometer comprising:

a body having an orifice through which ions can pass, wherein at least a portion of the body comprises titanium metal.

- 2. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the entire body comprises titanium metal.
- 3. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the at least a portion of the body is coated with titanium metal.
- 4. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the at least a portion of the body includes one or more surfaces of the [ion transfer component] <u>skimmer</u>.
- 5. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the at least a portion of the body at least partially surrounds and defines the orifice.
- 6. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the titanium metal comprises an alloy of titanium.
- 7. (Currently amended) The [ion transfer component] skimmer of claim 6, wherein:

Applicant: Rohan Thakur Docket No.: 1022US/NAT

Serial No.: 10/796,717 Filed: 03/08/2004 Page: 3 of 9

the alloy of titanium is an alloy of titanium and one or more of the metals in the group consisting of aluminum, vanadium, molybdenum, manganese, iron, platinum, tin, copper, niobium, zirconium, and chromium.

8. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1, wherein: the titanium metal comprises commercially pure titanium.

- 9. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 8, wherein: the titanium metal comprises commercial grade I, II, III, or IV titanium.
- 10. (Cancelled)
- 11. (Currently amended) The [ion transfer component] <u>skimmer</u> of claim 1[0], wherein: the [lens] <u>skimmer</u> is configured such that an electrostatic potential can be applied.
- 12. (Currently amended) The ion transfer component of claim 1[0], wherein: the [lens] skimmer is configured such that an RF potential can be applied.
- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Cancelled)
- 16. (Cancelled)
- 17. (Cancelled)
- 18. (Cancelled)
- 19. (Cancelled)

Applicant: Rohan Thakur Docket No.: 1022US/NAT

Applicant: Ronan Thaku Serial No.: 10/796,717 Filed: 03/08/2004 Page: '4 of 9

20. (Currently Amended) A system for analyzing ions, the system comprising:

a source of ions for generating ions; and

a[n ion transfer component] skimmer according to claim 1.

21. (Currently Amended) The system of claim 20, wherein:

the ions adiabatically expand to form a supersonic free jet, and

at least a portion of the [ion transfer component] skimmer is disposed in an area of the

free jet expansion.

22. (Currently Amended) The system of claim 20, wherein:

the ions adiabatically expand to form a supersonic free jet, and

at least a portion of the [ion transfer component] skimmer is disposed in a zone of silence

resulting from the free jet expansion area.

23. (Currently Amended) The system of claim 20, wherein:

the ions adiabatically expand to form a supersonic free jet, and

at least a portion of the [ion transfer component] skimmer is disposed outside an area of

free expansion.

24. (Currently Amended) The system of claim 20, wherein:

the source of ions comprises an orifice or aperture through which the ions emerge,

and

at least a portion of the [ion transfer component] skimmer is disposed such that the

orifice is disposed opposingly to the emerging ions

25. (Currently Amended) The system of claim 20, wherein:

the ions generated by the source emerge along an axis, and

at least a portion of the [ion transfer component] skimmer is disposed at an angle from

the axis.